



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,873	02/02/2004	Alex Ka Tim Poon	PA0559-US / 11269.63	1051

7590 08/27/2008
The Law Office of Steven G. Roeder
5560 Chelsea Avenue
La Jolla, CA 92037

EXAMINER

SMYTH, ANDREW P

ART UNIT	PAPER NUMBER
----------	--------------

2881

MAIL DATE	DELIVERY MODE
-----------	---------------

08/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/770,873	Applicant(s) POON ET AL.	
	Examiner ANDREW SMYTH	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) 44,45 and 68 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22,41-43,46-58,73 and 74 is/are allowed.
- 6) ☒ Claim(s) 23,24,37-40,59,60,71,72,75 and 76 is/are rejected.
- 7) ☒ Claim(s) 25-36,61-70 and 77 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/02/2004, 05/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 23, 24, 59, and 60 amended.
2. Claims 44-45 and 68 canceled.
3. Claims 75-78 are new claims.
4. Claims 1-22, 41-43, 46-58, 73, and 74 previously allowed.

Response to Arguments

1. See claim objections and rejections below.

Claim Objections

1. Claims 25-36, 61-70, and 77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 23-24, 37-40, 59-60, 71-72, and 75-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Miura et al. (US 20020085192).

Miura discloses the following:

Regarding applicant's claims 23 and 59. (Currently Amended) A combination / method comprising:

Art Unit: 2881

a mover (130) that moves a stage (131) along a first axis that includes a first stage region and a second stage region; and
a force provider assembly including a pneumatic force provider (132) coupled to the stage [0010](figure 2, 132), the force provider providing an acceleration/deceleration force on the stage along the stage first axis when the stage is in the first stage region and approximately no force (inherent) on the stage when the stage is in the second stage region (method inherent in the device).

Regarding applicant's claim 24 and 60 (Currently Amended) The combination / method (inherent in the device) of claim 23 wherein the first axis includes a third stage region and the force provider provides an acceleration/deceleration force on the stage when the stage is in the third stage region (inherent).

Regarding applicant's claim 37. (Previously Presented) A stage assembly for moving a device , the stage assembly comprising:
a stage (figure 2, 130) that retains the device; and the combination of claim 23 coupled to the stage.

Regarding applicant's claim 38. (Original) An exposure apparatus including the stage assembly of claim 37 (figure 2, 103-W).

Regarding applicant's claim 39. (Original) An object (W) on which an image has been formed by the exposure apparatus of claim 38.

Regarding applicant's claim 40. (Original) A semiconductor wafer (W) on which an image has been formed by the exposure apparatus of claim 38.

Regarding applicant's claim 71. (Original) A method for making an exposure apparatus comprising the steps of providing an illumination source (103), providing a stage (130, 131, 136), and accelerating and decelerating the stage by the method of claim 59.

Regarding applicant's claim 72. (Original) A method of making a wafer (W) including the steps of providing a substrate (W) and forming an image on the substrate with the exposure apparatus made by the method of claim 71.

Regarding applicant's claim 75. (New) A combination comprising:
a mover (130) that moves a stage (131) along a first axis that includes a first stage region and a second stage region; and
a force provider assembly including a pneumatic force provider (132)[0010] coupled to the stage, the force provider providing an acceleration/deceleration force on the stage when the stage is moving along the first axis in the first stage region and approximately no force on the stage when the stage is moving along the first axis in the second stage region (inherent) .

Regarding applicant's claim 76. (New) The combination of claim 75 wherein the force provider provides the acceleration/deceleration force on the stage along the first axis when the stage is in the first stage region (inherent).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent prior art is closely related art that individually or in

Art Unit: 2881

combination could be considered grounds for rejection. See references cited for a listing of the pertinent prior art found and the prior art found.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Smyth whose telephone number is 571-270-1746. The examiner can normally be reached on 7:30AM - 5:00PM; Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jack I. Berman/
Primary Examiner, Art Unit 2881
/A. S./
Examiner, Art Unit 2881